



Richmond Hyperbarics & Naturopathic Clinic

Unit 4 – 12180 Horseshoe Way
Richmond B.C.
V7A 4V5 Canada

TEL | 604 277 8608

| **888 373 0888**

FAX | 604 277 8628

QUESTIONS | 604 338 8375

EMAIL | drsantos@shaw.ca

Article



ENVIRONMENTAL | DEFENCE

1984 - 2004: 20 Years of Defending the Earth

By André Picard
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Canadians a toxic lot: study

World-renowned wildlife artist Robert Bateman has used his fame and fortune to promote environmental protection. But now he has gone one step further; giving literally of his blood—blood that was tested for a host of contaminants as part of a study.

The results, to be released in a report today, show that despite his clean-living ways, Mr. Bateman's body is a repository for 48 different toxic substances. These include heavy metals; PCBs (polychlorinated biphenyls used in electrical transformers and now banned); PBDEs (polybrominated diphenyl ethers used as fire retardants); PFOs (perfluorinated chemicals used in stain repellants, non-stick cookware and food packaging), pesticides and insecticides.

While this may seem startling for someone who lives on B.C.'s idyllic Saltspring Island and eats organic food, Mr. Bateman's so-called "body burden" is that of an average Canadian.

"The bottom line being that we are all polluted," said Dr. Rick Smith, executive director of Environmental Defence Canada, a Toronto-based environmental health group. "The message to Canadians is -- it doesn't matter where you live, how old you are, it doesn't matter how clean living you are or if you eat organic food, or if you get a lot of exercise. We all carry inside of us hundreds of different pollutants and these things are accumulating inside our bodies every day."

The new report, titled "Toxic Nation: A Report on Pollution in Canadians," is the first to try and determine how many manmade chemicals are ending up in average citizens.

Tests were done on 11 volunteers, including Mr. Bateman, for 88 chemicals believed to be carcinogenic, to disrupt reproduction and hormonal function and interfere with fetal development. Researchers found that, on average, participants had a cocktail of 44 in their bodies.

While the health effects of these chemicals are not clear, Dr. Smith said what is clear is that Canadians would be better off without the exposure. "The fact is that you and I have hundreds of chemicals in the body," he said. "We are part of a huge uncontrolled experiment, the outcome of which is entirely unpredictable."

Health Canada spokesperson Paul Glover said: "It's only 11 people. It's not statistically significant . . . but it is an indication and we will take a look at it."

Researchers argue that the volunteers represent a cross-section of the Canadian population, and there is every reason to believe contaminant levels would be similar in the general population. (A number of other countries have done body-burden studies, which are very expensive, but Health Canada has not, so the non-profit group decided to proceed on its own. Testing cost \$1,500 per person.)

Mr. Glover said "obviously Canadians will be somewhat concerned. They didn't choose to put chemicals in their bodies. So how did they get there? But for Health Canada the question is: What is the level of risk?"

Dr. Kapil Khatter, head of Canadian Physicians for the Environment, also volunteered to be tested, and 45 of the 88 compounds were detected in his blood. The expert said he was "shocked by the levels of pesticides and heavy metals in my body."

Dr. Khatter said what angers him is how little control individuals have over their exposure: "We don't have the choice to avoid things coming of smokestacks and getting into our food and water and things in consumer products we don't know about."

Dr. Khatter said Canadians are generally too complacent about pollutants and he hopes the new study will help draw attention to how they are being affected personally.

The most polluted individual in the study turned out to be David Masty, chief of the Whapmagoostui First Nation, a Cree community in northern Quebec. A total of 51 chemicals was found in his blood, as well as some of the highest levels of heavy

metals, lending more credence to the belief that toxic pollutants are accumulating in Canada's North.

According to the report, Canada is a laggard when it comes to regulating against pollution, and Environmental Defence calls on government to legislate the phase-out of brominated flame retardants (PBDEs), perfluorinated chemicals and their precursors (PFOS), and phthalates (chemicals that make plastics soft).

The report noted that younger test subjects had much lower levels of PCBs, chemicals banned in 1977, and said that shows regulation works.

Environmental Defence also calls on individual Canadians to reduce their personal exposure to chemicals by, for example, buying organic foods and using non-toxic cleaning products -- though such an approach didn't seem to help Mr. Bateman.

"I had no idea when they were taking those samples out of my arm that there was a possibility that all [those chemicals] could be in there," said the 75-year-old artist.